

17feb04 17:57:50 User015070 Session D9655.1  
Sub account: HARD1.033A-CSP

FILE LOWE.DOC

\*\*\*\*\*ENGLISH LANGUAGE ABSTRACT FOR FR 2611432 (LOWE)\*\*\*\*\*

SYSTEM:OS - DIALOG OneSearch

File 351:Derwent WPI 1963-2004/UD,UM &UP=200411

(c) 2004 Thomson Derwent

\*File 351: New prices as of 1-1-04 per Information Provider request. See  
HELP RATES351

File 345:Inpadoc/Fam.& Legal Stat 1968-2003/UD=200407

(c) 2004 EPO

\*File 345: October 12, 2003 - changes to legal status now online.  
See HELP NEWS 345 for details.

Set Items Description

?s an,pn=fr 2611432

	0	AN=FR 2611432
	2	PN=FR 2611432
S1	2	AN,PN=FR 2611432

1/7/1 (Item 1 from file: 351)  
DIALOG(R)File 351:Derwent WPI  
(c) 2004 Thomson Derwent. All rts. reserv.

007415405

WPI Acc No: 1988-049340/198807

Prepn. of non-clay cat box filler - by shredding plant fibre slurry,  
adding adjuvants, granulating and drying

Patent Assignee: THERMO FIBERGEN INC (THER-N); LOWE H E (LOWE-I)

Inventor: LOWE H E; YODER R L

Number of Countries: 008 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4721059	A	19880126	US 86901963	A	19860827	198807 B
DE 3707473	A	19880922	DE 3707473	A	19870309	198839
FR 2611432	A	19880909	FR 873011	A	19870305	198843
NL 8700553	A	19881003	NL 87553	A	19870309	198843
SE 8700992	A	19880911				198844
CH 670546	A	19890630				198930
CA 1279179	C	19910122				199110 N
IT 1217134	B	19900314				199208 N
DE 3707473	C2	19970911	DE 3707473	A	19870309	199740 N

Priority Applications (No Type Date): US 85714450 A 19850321; US 86901963 A  
19860827; DE 3707473 A 19870309; FR 873011 A 19870305; NL 87553 A  
19870309

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4721059	A		500		
DE 3707473	C2		5	B01J-020/30	

Abstract (Basic): US 4721059 A

Filler material is prep'd. as follows: (a) the H2O-content of a plant fibre (I) slurry is adjusted until the slurry is shredable; (b) the fibre size of the slurry is reduced; (c) the physical props. of the slurry are adjusted to predetermined standards; (d) the slurry is agglomerated by growth agitation procedures into granules which mimic the appearance of naturally occurring clay; and (e) the granules are dried to H2O-content not more than 10%.

Step (a). Pref'd. (I) include tree fibres, citrus pulp, sugar cane or beets, grain, potatoes, or esp. de-inked paper sludge (40-80% fibres by wt.), or prim. process paper sludge (75-99% fibres by wt.). H2O adjustment is pref. by drying at 150 deg.F in a tray drier. Step (b). Slurry is pref. shredded to fibre size 1-10 mm. Step (c). Pref. the slurry is treated with a dye, a biocide, a fragrance, and a filler (kaolin, TiO2 or barytes) to increase the density. Step (d). Agglomeration is e.g. in a pin mill or in a roller with added H2O. Spherical granules are pref. flattened before step (e).

Pref'd. filler granules have size 6-60 esp. 8-20 mesh.

USE/ADVANTAGE - The filler is prep'd. economically, and is dustless, and easy to dispose of, and is useful as a cat box filler. The prod. has excellent physical props. which may be accurately controlled, and resembles a clay-based filler. In an example, de-inked sludge was oven-dried at 250 deg.F (to 45% H2O), shredded, then treated with H2O (to 49%). The mixt. was granulated, dried at 250 deg.F (to 2.21% H2O), then treated with biocide (500 ppm), fragrance

Derwent Class: C03; D22; F09; P14

International Patent Class (Main): B01J-020/30

International Patent Class (Additional): A01K-001/01; B01J-002/00;

B01J-020/22; B01J-020/28; C09K-003/32; D21C-005/02; D21H-003/82

17feb04 17:59:00 User015070 Session D9655.2

Sub account: HARD1.033A-CSP

\$6.70 0.020 Hrs File351

\$5.05 1 Type(s) in Format 7

\$5.05 1 Types

\$11.75 Estimated cost File351

\$0.72 0.012 Hrs File345

\$0.72 Estimated cost File345

OneSearch, 2 files, 0.033 Hrs FileOS

\$0.50 TELNET

\$12.97 Estimated cost this search

\$13.37 Estimated total session cost 0.041 Hrs.

### Status: Signed Off. (2 minutes)